

CLAIM SET AS AMENDED:

1-12. (Canceled)

13. (Currently Amended) An information carrier medium which comprises:

at least first and second sheet members each having first and second surfaces opposite to each other, said first and second sheet members being laminated together with the first surface of the first sheet member bonded to the first surface of the second sheet member; and

a security indicium formed on at least one of the first surfaces of the respective first and second sheet members, said security indicium comprising a pattern of a plurality of regions with various sizes, each of the regions in said security indicium being made of two inking materials a first inking material and a second inking material which are disposed separately from each other,

the first inking material for giving out light in response responding to different wavelengths to a first wavelength of incident light for giving out light, and the second first inking material for giving out light in response to the second wavelength of incident light,

the light given out by ~~one of the two~~ the first inking materials ~~material~~ having a first wavelength different from a second wavelength, the light given out by the ~~other of the two~~ first inking materials ~~material~~ having a the first wavelength and not having a the second wavelength different from the first wavelength,

the light given out by the ~~other of the two~~ second inking materials material not having the first wavelength and having the second wavelength, the first and second sheet members being opaque to visible light and transparent to the lights of the first and second wavelengths.

14. (Currently Amended) The information carrier medium as claimed in claim 13, wherein one of the inking materials is ~~of a kind~~ capable of transmitting the light of the first wavelength, and the other of the inking materials is capable of transmitting the light of the second wavelength and absorbing the light of the first wavelength when irradiated by the incident light.

15. (Currently Amended) The information carrier medium as claimed in claim 13, wherein one of the inking materials is ~~of a kind~~ capable of emitting light of the first wavelength, and the other of the inking materials is capable of emitting the light of the second wavelength when irradiated by the incident light.

16. (Previously Presented) The information carrier medium as claimed in claim 13, wherein one of the inking materials is capable of scattering the light of the first wavelength, and the other of the inking materials is capable of scattering the light of the second wavelength when irradiated by the incident light.

17. (Previously Presented) The information carrier medium as claimed in claim 13, wherein one of the inking materials is capable of transmitting the light of the first wavelength and absorbing a light of the second wavelength, and the other of the inking materials is capable of emitting the light of the second wavelength when irradiated by the incident light.

18. (Previously Presented) The information carrier medium as claimed in claim 13, wherein the security indicium formed on such one of the first surfaces of the respective first and second sheet members is invisible to naked eyes.

19. (Previously Presented) The information carrier medium as claimed in claim 18, wherein said first and second sheet members are made of an opaque synthetic resin transparent to a light different from visible light.

20. (Currently Amended) The information carrier medium as claimed in claim 13, wherein said first and second sheet members are made of an opaque synthetic resin containing a polyvinyl chloride copolymer as a principal component, and ~~said~~ an overlay film is made of a hard polyvinyl chloride.

21. (Previously Presented) The information carrier medium as claimed in claim 13,

wherein said security indicium comprises a bar code made of the two inking materials.

22. (Previously Presented) The information carrier medium as claimed in claim 13, wherein said security indicium comprises characters made of the two inking materials.

23. (Previously Presented) The information carrier medium as claimed in claim 13, further comprising an overlay film integrated with an outer surface of said at least first and second sheet members laminated together, the overlay film having a magnetic strip layered on an outer surface thereof.

24. (Currently Amended) An electro-optical reader for reading an information carrier medium comprising at least first and second sheet members each having first and second surfaces opposite to each other, said first and second sheet members being laminated together with the first surface of the first sheet member bonded to the first surface of the second sheet member; and a security indicium formed on at least one of the first surfaces of the respective first and second sheet members, said security indicium comprising a pattern of a plurality of regions with various sizes, each of the regions in said security indicium being made of two inking materials a first inking material and a second inking material which are disposed separately from each other,

the first inking material for giving out light in response ~~responding to different wavelengths to a first wavelength of incident light for giving out light, and the second inking material for giving out light in response to the second wavelength of incident light,~~

the light given out by ~~one of the two~~ the first inking materials material having a first wavelength different from a second wavelength,

the light given out by the ~~other of the two~~ second inking materials material not having the first wavelength and having the second wavelength, the first and second sheet members being opaque to visible light and transparent to the lights of the first and second wavelengths,
said reader comprising:

~~two sources of~~ a first source for projecting the lights of a different wavelengths light of the first wavelength and a second source projecting light of the second wavelength towards the information carrier medium to illuminate a portion of the information carrier medium in register with the security indicium;

a first detector and a second detector for detecting rays of light obtained from ~~that the~~ portion of the information carrier medium;

a signal processor which receives signals from said ~~detector~~ detectors and ~~provide~~ provides an output signal synthesized by compensating a relative distance between the lights of different wavelengths the first wavelength and the second wavelength projected by said ~~two sources~~ first source and said second source;

a storage device which stores a reference signal for the first and second wavelengths in

correspondence to the security indicium; and

a comparator connected with the signal processor for comparing the output signal from said signal processor with the reference signal to verify an authenticity of the information carrier medium.

25. (Currently Amended) The electro-optical reader as claimed in claim 24, further comprising a mechanism for guiding the information carrier medium relative to the lights projected by said ~~two~~ first and second sources, wherein said detector comprises two photo-detectors for detecting the rays of light of the first and second wavelengths, respectively, and said signal processor comprises a delay circuit for compensating a delay of signals due to a relative distance between the two photo-detectors.

26. (Previously Presented) The electro-optical reader as claimed in claim 24, wherein said detector comprises a charge-coupled device line sensor.

27. (Previously Presented) The electro-optical reader as claimed in claim 24, wherein said detector comprises a charge-coupled device area sensor.

28. (Currently Amended) A method of verifying authenticity of an information carrier medium comprising at least first and second sheet members each having first and second

surfaces opposite to each other, said first and second sheet members being laminated together with the first surface of the first sheet member bonded to the first surface of the second sheet member; and a security indicium formed on at least one of the first surfaces of the respective first and second sheet members, said security indicium comprising a pattern of a plurality of regions with various sizes, each of the regions in said security indicium being made of two inking materials a first inking material and a second inking material which are disposed separately from each other,

the first inking material for giving out light in response responding to different wavelengths to a first wavelength of incident light for giving out light, and the second first inking material for giving out light in response to the second wavelength of incident light,

the light given out by ~~one of the two~~ the first inking materials material having a first wavelength different from a second wavelength,

the light given out by the ~~other of the two~~ second inking materials material not having the first wavelength and having the second wavelength, , the first and second sheet members being opaque to visible light and transparent to the lights of the first and second wavelengths,
said method comprising the steps of:

providing a first source for projecting the incident light of the first wavelength and providing a second source for projecting the incident light of the second wavelength

projecting incident lights from the first source and the second source towards the
information carrier medium to illuminate a portion of the information carrier medium in register

with the security indicium;

detecting rays of lights obtained from that portion of the information carrier medium;

synthesizing the detected signals to provide an output signal by compensating relative distance between the lights projected by the ~~two sources~~ first and the second source;

comparing outputs from the photo-detector with a reference signal stored beforehand for the first and second wavelengths in correspondence to the security indicium; and

in the event that the output from the photo-detector matches with the reference signal, determining that the information carrier medium is authentic.

29. (New) The electro-optical reader as claimed in claim 24, wherein the lights projected from the first source and the second source are substantially parallel to each other.

30. (New) The method of verifying authenticity of an information carrier medium as claimed in claim 28, further comprising the step of projecting the light rays from the first source and the second source in a direction substantially parallel to each other.

31. (New) The electro-optical reader as claimed in claim 24, wherein a portion of the light projected from the first source that is reflected by the first inking material is detected by the first detector, and a portion of the light projected from the second source that is reflected by the second inking material is detected by the second detector.

32. (New) The method of verifying authenticity of an information carrier medium as claimed in claim 28, further comprising the steps of detecting a portion of the light projected from the first source and reflected by the first inking material by a first photo detector, and detecting a portion of the light projected from the second source and reflected by the second inking material by a second photo detector.